

REMARKS

An excess claim fee payment letter is submitted herewith for two (2) excess independent claim and five (5) excess total claims.

Claims 1-25 are all the claims presently pending in the application. Claims 1, 2, 7-9, and 14 have been amended merely to make editorial amendments in conformance with U.S. Patent practice. Claims 15-25 have been added to provide more varied protection for the present invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-14 stand rejected on prior art grounds.

Claims 1, 4, 7 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Fujiwara (U.S. Patent No. 6,583,809). Claims 2, 3, 5, 6 and 8-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujiwara.

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention is directed to a computing system using a digital camera that is capable of inputting moving picture or still picture data.

In an illustrative, non-limiting embodiment of the invention as defined by independent claim 1, a computer system includes a host computer, a digital camera, and a high-speed serial interface connecting the digital camera to the host computer.

The host computer includes a device driver including a first device function for recognizing the digital camera as a storage driver, which records data representative of a still picture, and at least one of writing and reading the image data at least one of in and out of the recording medium, a second device function for recognizing the digital camera as an image device, which generates image data representative of a moving picture, and reading the image data out of the image sensor at a preselected period, and a third device function for recognizing the digital camera as an operating device and feeding an operation command to the digital camera. A controller drives, in response to an access made from one of the first device function, the second device function, and the third device function of the host computer via the high-speed serial interface, portions of the digital camera corresponding to the access to thereby control data transfer and a shooting operation.

The high-speed serial interface includes at least one of a USB (Universal Serial Bus) serial interface and an IEEE 1394 serial interface. When the high-speed serial interface comprises the USB serial interface, during an electronic conference between the host computer and the another computer, the image data representative of a still picture is transferred by the first device function using bulk transfer, which transfers image data at an idle position of a transfer frame.

On the other hand, when the high-speed serial interface comprises the IEEE 1394 serial interface, during the electronic conference between the host computer and the another

computer, the image data representative of the still picture is transferred by the first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.

In another exemplary embodiment of the invention, as defined by independent claim 14, a digital camera includes a high-speed serial interface which includes at least one of a USB (Universal Serial Bus) serial interface and an IEEE 1394 serial interface. When the high-speed serial interface comprises the USB serial interface, during an electronic conference between a host computer and the another computer, the image data representative of a still picture is transferred by a first device function using bulk transfer, which transfers image data at an idle position of a transfer frame.

On the other hand, when the high-speed serial interface comprises the IEEE 1394 serial interface, during the electronic conference between the host computer and the another computer, the image data representative of the still picture is transferred by the first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.

The above exemplary structures provide many advantages. That is, in an electronic conference system, a participant in a conference sometimes desires to present material during discussions with another participant (e.g., during the electronic conference). In such a case, the material must be input to a host computer and then sent to the other participant.

In conventional systems, for example, the material may be shot by a video camera or a CCD camera and then sent as moving picture data. However, resolution available with a video camera or a CCD camera is too poor for the material to be read. It is therefore

necessary to connect a scanner or similar peripheral unit to the host computer so as to input data representative of the material to the host computer beforehand, or to read the material and send the resulting data each time. The peripheral unit connected to the host computer makes the entire system and manipulation thereof sophisticated/complex (e.g., see specification at pages 2-3, paragraph [0006]).

The claimed invention, on the other hand, provides a computer system using a digital camera that is capable of inputting image data representative of a moving picture or a still picture taken beforehand or taken on the spot during an electronic conference (e.g., during the video conference) in a host computer with a simple configuration (e.g., see specification at page 3, paragraph [0007]).

In an illustrative embodiment, only the camera is connected to the host computer by, for example, a USB cable, and therefore, the claimed invention provides a much simpler configuration than the conventional computer systems, and also, operating of the claimed system can effectively be started by simply using an icon representative of the camera (e.g., see specification at pages 22-23, paragraph [0059]).

II. THE PRIOR ART REJECTIONS

Claims 1, 4, 7 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Fujiwara. Claims 2, 3, 5, 6 and 8-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujiwara.

Independent claim 1 recites, *inter alia*:

wherein, when said high-speed serial interface comprises said USB serial interface, during an electronic conference between said host computer and said another computer, the image data representative of a still picture is transferred by said first device function using bulk transfer, which transfers image data at an idle position of a transfer frame, and

wherein, when said high-speed serial interface comprises said IEEE 1394 serial interface, during said electronic conference between said host computer and said another computer, the image data representative of said still picture is transferred by said first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle (emphasis added).

In the present Office Action, the Examiner alleges that Fujiwara discloses all of the features of the claimed invention.

However, Applicant respectfully submits that the portion of Fujiwara which the Examiner relies upon is directed to Figure 11 (i.e., the first embodiment of Fujiwara), which does not include a case where a video conference is in progress.

On the contrary, the second embodiment of Fujiwara, as shown in Figure 12, specifically is identified as being directed to “transfer of data from the visualizer 1 to the host personal computer 8 during a videoconference” (e.g., see Fujiwara at column 12, lines 16-18; emphasis added).

Indeed, Figure 12 includes step S14, in which it is determined whether a video conference is in progress.

As shown in Figure 12, if a video conference is in progress, Fujiwara discloses step S15, in which the still image is compressed, multiplexed, and transferred by isochronous transfer (see step S11 of Figure 12), not by bulk transfer, as claimed in independent claim 1.

On the other hand, as shown in Figure 12, if it is determined that a video conference is not in progress, then the Fujiwara reference instructs the bulk transfer of the still image to the host PC (e.g., see step S16 of Figure 12).

In other words, Fujiwara does not disclose or suggest that the still image is transferred by bulk transfer if it is determined that a video conference is in progress (i.e., during a video conference).

In comparison, an object of the claimed invention is to transfer the still image data during an electronic conference.

That is, the exemplary aspects of the claimed invention provide a computer system using a digital camera that is capable of inputting image data representative of a moving picture or a still picture taken beforehand or taken on the spot during an electronic conference (e.g., during the video conference) in a host computer with a simple configuration (e.g., see specification at page 3, paragraph [0007]).

Thus, according to the claimed invention as defined by claim 1, when the high-speed serial interface comprises a USB serial interface, during an electronic conference between the host computer and the another computer, the image data representative of a still picture is transferred by the first device function using bulk transfer, which transfers image data at an idle position of a transfer frame.

Fujiwara does not disclose or suggest transferring image data “using bulk transfer”, or for that matter, performing the transfer “at an idle position of a transfer frame”, as claimed in claim 1.

On the other hand, according to the claimed invention as further defined by independent claim 1, when the high-speed serial interface comprises an IEEE 1394 serial interface, during the electronic conference between the host computer and the another computer, the image data representative of the still picture is transferred by the first device function using asynchronous transfer, which transfers data when a bus is idle in a preselected transfer cycle.

Fujiwara does not disclose or suggest transferring image data “using asynchronous transfer”, or for that matter, performing the transfer “when a bus is idle in a preselected transfer cycle”, as claimed in claim 1.

For the foregoing reasons, Applicant respectfully submits that Fujiwara does not disclose or suggest all of the elements of the claimed invention, or for that matter, the advantages derived therefrom.

Thus, Applicant respectfully submits that Fujiwara clearly does not anticipate, or render obvious, the claimed invention, and therefore, requests that the Examiner withdraw this rejection.

Moreover, with respect to dependent claim 2, the Examiner acknowledges that Fujiwara does not specifically disclose or suggest that the interrupt transfer transfers data when polling at a pre-selected period (e.g., see Office Action at page 5, numbered paragraph 7, lines 9-10).

However, the Examiner takes Official Notice that it was well known in the art at the time of the invention that interrupt transfer transfers data when polling at a pre-selected period, and therefore, because such allegedly is well known, the Examiner asserts that it would have been obvious to do so in Fujiwara (e.g., see Office Action at page 5, numbered paragraph 7, lines 11-15).

Applicant respectfully submits that Official Notice should only be used to “fill in the gaps in an insubstantial matter” and where the facts asserted to be well-known are capable of instant and unquestionable demonstration as being well-known at the time of the invention (e.g., see M.P.E.P. § 2144.04).

Applicant submits, however, that the facts asserted are not capable of instant and unquestionable demonstration as being well-known at the time of the invention.

For example, Applicant notes that the present invention claims priority from December 20, 1999, which is more than four years prior to the present Office Action. Thus, Applicant respectfully submits that the facts asserted are not capable of instant and unquestionable demonstration as being well-known at the time of the invention, since the state of the art at the time of the invention it is not clear and unquestionable.

Therefore, Applicant respectfully requests that the Examiner cite a reference in support of the allegedly well-known features at the time of the invention, of which the Examiner takes Official Notice (e.g., a citation to some reference work recognized as standard in the pertinent art; see M.P.E.P. § 2144.03(A)).

Applicant respectfully submits, however, that even assuming *arguendo* that such was well known at the time of the invention, the Office Action cannot dispense with the

requirement for establishing a reasonable motivation or suggestion for modifying Fujiwara to arrive at the claimed invention.

Applicant respectfully submits that the Office Action also does not cite support for *how* or *where* Fujiwara discloses or suggests that the image data representative of a moving picture is transferred by the second device function using isochronous transfer, which transfers a preselected amount of data every preselected frame.

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established at least with respect to claim 2.

With respect to claim 3, Applicant respectfully submits that the Office Action does not cite support for *how* or *where* Fujiwara discloses or suggests that the image data representative of a moving picture is transferred by the second device using isochronous transfer, which transfers data by seizing a channel every preselected transfer cycle.

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established at least with respect to claim 3.

With respect to claims 10-13, the Examiner acknowledges that Fujiwara does not specifically disclose or suggest that the computer can re-program the camera memory in order to change the software written in the memory of the camera (e.g., see Office Action at page 8, lines 1-2).

However, the Examiner takes Official Notice that it allegedly was well known in the art at the time of the invention to have the memory reprogrammed by a computer by uploading the new system software via a USB interface (e.g., see Office Action at page 8, lines 3-6).

As mentioned above, Official Notice should only be used to “fill in the gaps in an insubstantial matter” and where the facts asserted to be well-known are capable of instant and unquestionable demonstration as being well-known at the time of the invention (e.g., see M.P.E.P. § 2144.04).

However, in this case, Applicant submits that Official Notice is being relied upon for the teaching of all of the features of claims 10-13, not merely to fill in the gaps. Thus, Applicant respectfully submits that it is not appropriate to rely on Official notice to support a rejection of these features.

Also, Applicant respectfully submits that the facts asserted are not capable of instant and unquestionable demonstration as being well-known at the time of the invention, for example, because the present invention claims priority from December 20, 1999, which is more than four years prior to the present Office Action. As such, the facts asserted are not capable of instant and unquestionable demonstration as being well-known at the time of the invention, since the state of the art at the time of the invention it is not clear and unquestionable.

Therefore, Applicant respectfully requests that the Examiner cite a reference in support of the allegedly well-known features at the time of the invention, of which the Examiner takes Official Notice (e.g., a citation to some reference work recognized as standard in the pertinent art; see M.P.E.P. § 2144.03(A)).

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established at least with respect to claims 10-13.

For the foregoing reasons, Applicant respectfully submits that Fujiwara does not disclose or suggest all of the elements of the claimed invention, or for that matter, the advantages derived therefrom.

Thus, Applicant respectfully submits that Fujiwara clearly does not anticipate, or render obvious, the claimed invention, and therefore, requests that the Examiner withdraw this rejection.

III. NEW CLAIMS

New claims 15-25 are added to provide more varied protection for the present invention, as defined in the original specification and drawings.

Applicant respectfully submits that claims 15-25 are patentable over the cited references for somewhat similar reasons as those set forth above, as well as for the additional features recited therein.

Therefore, Applicant respectfully requests that the Examiner permit these claims to pass to allowance.

IV. FORMAL MATTERS AND CONCLUSION

Minor errors in the specification have been corrected.

The Title of the Invention has been amended in accordance with the Examiner's suggestion, and therefore, Applicant requests that the Examiner withdraw this objection.

Figure 2A also is amended herewith to correct a minor error. The Examiner is requested to acknowledge receipt of and accept the replacement sheet for Figure 2A. An annotated sheet showing the change made is included for the Examiner's convenience.

Applicant notes that the Examiner has not considered each of the references cited in the IDS filed on December 18, 2000 or provided an initialed and signed form PTO 1449 indicating the same.

However, Applicant submits that the Information Disclosure Statement fully complied with M.P.E.P. § 609 and 37 C.F.R. §§ 1.97-1.99.

Regarding December 18, 2000 IDS, it was noted in the IDS that, in full compliance with M.P.E.P. § 609 and 37 C.F.R. §§ 1.97-1.99, the relevance of the documents was discussed on pages 1-2 of the present application. This is in full compliance with the concise explanation requirement under 37 C.F.R. §§ 1.98(a)(3).

Hence, the Examiner is requested to consider and initial all of the references cited on the PTO-1449 Form for the Information Disclosure Statements filed on December 18, 2000. For the Examiner's convenience, a duplicate copy of the PTO-1449 Form is resubmitted herewith.


In view of the foregoing, Applicant submits that claims 1-25, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: August 31, 2004


John J. Dresch, Esq.
Registration No. 46,672

Sean M. McGinn, Esq.
Registration No. 34,386

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254